WHAT IS CLAIMED IS:

1. A stitched yarn surface structure comprising:

a backing having a first and a second surface and a thickness dimension T;

a plurality of rows of face yarn underlaps covering the entire first surface of the backing, the yarn underlaps forming a yarn surface having a height dimension D,

wherein the thickness dimension T is at least twice the height dimension D and not less than two millimeters.

2. The stitched yarn surface structure of claim 1 wherein the face yarn underlaps are held to the backing by a plurality of parallel lines of overstitches extending longitudinally along the backing.

3. The stitched yarn surface structure of claim 2 further comprising a plurality of strands of binder material disposed between the yarn underlaps and the first surface of the backing.

4. The stitched yarn surface structure of claim 3 wherein the strands of binder material extend longitudinally along the backing.

5. The stitched yarn surface structure of claim 3 wherein the strands of binder material extend transversely across the backing.

6. The stitched yarn surface structure of claim 2 wherein each overstitch is formed from a stitching thread comprising a composite of a low-melting temperature binder material and a higher melting temperature material.

7. The stitched yarn surface structure of claim 1 further comprising a sheet of material disposed between the yarn underlaps and the first surface of the backing.

8. The stitched yarn surface structure of claim 7 wherein the sheet of material disposed between the yarn underlaps and the first surface of the backing is made from a binder material.

9. The stitched yarn surface structure of claim 7 wherein the sheet of material disposed between the yarn underlaps and the first surface of the backing is made from a moisture blocking material.

10. The stitched yarn surface structure of claim 1 further comprising a sheet of moisture blocking material disposed adjacent to the second surface of the backing.

11. The stitched yarn surface structure of claim 1 wherein the backing comprises at least two layers of dissimilar material.

12. The stitched yarn surface structure of claim 11 wherein one of the layers of the backing comprises is made of a soft, cushioning material.

13. The stitched yarn surface structure of claim 12 wherein the layer of the soft, cushioning material is disposed adjacent to the yarn underlaps.

14. The stitched yarn surface structure of claim 2 further comprising a plurality of strands of reinforcing material disposed between the yarn underlaps and the first surface of the backing.

15. The stitched yarn surface structure of claim 14 wherein the strands of reinforcing material extend longitudinally along the backing.

16. The stitched yarn surface structure of claim 14 wherein the strands of reinforcing material extend transversely across the backing.

17. The stitched yarn surface structure of claim 1 further comprising a plurality of strands of reinforcing material disposed adjacent to the second surface of the backing, the strands of reinforcing material extend transversely across the backing.

18. The stitched yarn surface structure of claim 2 wherein, along a predetermined transverse cross section of the yarn surface structure, the thickness dimension T of the backing at a point substantially midway between a pair of overstitches in transversely adjacent lines of overstitches is at least ten percent (10%) greater than the thickness dimension T' of the backing in the vicinity of each of the pair of overstitches.

19. The stitched yarn surface structure of claim 2 wherein, along a predetermined transverse cross section of the yarn surface structure,

the backing has a thickness dimension T at a point substantially midway between a pair of overstitches in transversely adjacent lines of overstitches, and

the backing has a thickness dimension T' in the vicinity of the first one of the pair of overstitches,

the backing has a thickness dimension T" in the vicinity of the second one of the pair of overstitches,

the thickness dimension T' varies by at least ten percent (10%) from the thickness dimension T".

20. The stitched yarn surface structure of claim 2 wherein, along a predetermined longitudinally extending line of overstitches,

the thickness dimension T' of the backing in the vicinity of a first overstitch in the longitudinal line of overstitches varies by at least ten percent (10%) from the thickness dimension T" the vicinity of an adjacent overstitch in the same longitudinal line of overstitches.

21. The stitched yarn surface structure of claim 1 wherein the yarns forming the underlaps are stitched into the backing, and

wherein, along a predetermined transverse cross section of the yarn surface structure, the thickness dimension T of the backing at a point substantially midway between a pair of stitches in transversely adjacent lines of stitches is at least ten percent (10%) greater than the thickness dimension T' of the backing in the vicinity of each of the pair of stitches.

22. The stitched yarn surface structure of claim 1 further comprising:

a flexible layer of fixative material disposed over the face yarn underlaps.

23. The stitched yarn surface structure of claim 1 further comprising:

a liquid coating of a moisture blocking material disposed over the second surface of the backing.

24. The stitched yarn surface structure of claim 1 further comprising:

a liquid coating of a binder material disposed over the first surface of the backing.

25. A process for forming a stitched yarn surface structure comprising the step of:

forming a plurality of rows of face yarn underlaps on a first surface of a backing thereby to form a yarn surface covering the entire surface of the backing, the backing having a thickness dimension T, the yarn surface having a height dimension D, wherein the thickness dimension T is at least twice the height dimension D and not less than two millimeters.

26. The process of claim 25 further comprising the steps of:

applying a binder material to the yarn surface structure,

activating the binder material to hold the yarn underlaps to the surface of the backing.

27. The process of claim 26 wherein the binder application step comprises the step of:

applying a liquid binder material to the first surface of the backing prior to forming the yarn underlaps.

28. The process of claim 26 wherein the binder application step comprises the step of:

applying a sheet of binder material to the first surface of the backing prior to forming the yarn underlaps.

29. The process of claim 25 further comprising the steps of:

applying a liquid fixative material to the face yarn underlaps; and thereafter

curing the fixative material to form a flexible layer over the face yarn underlaps.

30. The process of claim 25 further comprising the step of:

applying a liquid impervious material to the second surface of the backing.